

國立中央大學資訊管理學系碩士在職專班 95 學年度入學考試
資訊管理實務

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第一部分 50 分

一. 舉例說明企業組織如何利用資訊系統或是資訊科技來創造競爭力? (20 分)

二. 參考下述案例回答下列三個小題 (30 分)

(1) 在此個案中有哪些行為明顯違法?

(2) 在此個案中有哪些決策或是作為雖然沒有違法, 但是卻損害了善意的第三者權益, 違反資訊專業道德及職業倫理?

(3) 此個案凸顯哪些資訊系統安全的議題的重要性? 目前有哪些解決方案可供採用?

台北報導 刑事局偵九隊昨日偵獲一起國內首見侵入網路銀行客戶帳戶、盜領客戶存款案。嫌犯胡 X X 涉嫌侵入國內十餘家知名銀行所屬網路銀行, 竊取國內多家知名企業 網路銀行帳號、密碼、電子憑證等資料, 再盜領存款, 迄今得手高達數百萬元。

今年九月間, 國內多家知名銀行及知名企業陸續發現銀行帳戶遭歹徒透過網路銀行盜領存款, 刑事局長侯友宜直接獲多家被害銀行、企業報案後, 指由偵九隊三組組成專案小組偵辦。

偵九隊三組調查後發現, 歹徒是利用網路結合電話語音系統, 自遠端進行遙控取款, 被害人都是在不知情的情況下遭到盜領, 發現時都已過了數星期, 而且歹徒還未留下任何犯罪線索, 造成檢警追查困難。

專案人員經多日追查, 查出涉案嫌犯就是曾因網路盜刷信用卡案及電話遙控轉帳詐財案, 兩度被刑事局偵九隊逮捕送辦的嫌犯胡可之。經多日布線, 於上個月廿二日前往桃園市同安街胡嫌落腳處緝查, 查獲涉嫌提供人頭帳戶洗錢的胡嫌嚴姓女友, 但胡嫌並未在場。

正當警方繼續積極布線緝捕胡嫌之際, 調查局台北市調處恰巧也在追查胡嫌涉及網路銀行盜領案, 由於市調處提前採取搜索行動, 只查獲提供人頭帳戶的彭姓嫌犯。

查緝行動打草驚蛇, 胡嫌在得悉犯行敗露後, 隨即斷絕對外通訊, 並流竄全省各地, 造成偵九隊不少困擾。

不過, 由於專案人員曾兩度與胡嫌交手, 熟知胡嫌習性, 鎖定胡嫌熟悉的桃園、中壢一帶, 布下重兵跟監埋伏, 終於在前天深夜在桃園市逮獲胡嫌, 並在胡嫌藏匿處起出筆記型電腦、電子錢包光碟片、電話卡、偽造身分證、手機、筆記本、工商名錄大全等證物。

胡嫌在警訊中坦承自己因發現罹患腸癌無錢就醫, 才會重操舊業利用入侵網路進行盜領。

胡嫌表示, 自己經過五個多月研究, 精心鑽研網路系統及銀行語音系統所有破綻, 終於由此破綻作為轉帳盜領工具。

警方經追查得悉, 胡嫌是透過網路入侵國內日盛、世華、彰化、第一、萬泰等十餘家知名銀行, 取得客戶帳號、密碼, 並竄改部分聯絡電子郵件信箱及電話到預設的電話及帳號, 替被害公司申請「電子交易憑證」, 以留作日後盜領之用。

胡嫌自承先是以明碁電通公司設在世華銀行的帳戶為試金石, 結果成功轉帳數萬元至彭姓友人的帳戶, 他於是又陸續在彰化銀行、日盛銀行等多家知名企業帳戶, 成功盜領廿餘萬至四十萬元不等存款, 總計不法所得超過數百萬元, 所得贓款多花在購買轎車及風月場所上。

由於胡嫌在逃逸期間仍不斷利用網路遙控作案, 當警方逮捕胡嫌時, 胡嫌還正透過數據機、筆記型電腦等配備, 上網入侵玉山銀行的客戶。警方經偵訊後, 將胡嫌依法移送桃園地檢署偵辦。

第二部分 50分 (本部分共有2個個案, 以中文或英文作答均可)

一、Transforming the Entertainment Industry- Netflix

The online DVD rental pioneer Netflix is transforming the movie business with its unique business model, streamlined shipping strategy, and unique application infrastructure. Netflix is quickly becoming one of Hollywood's most promising new business partners and is experiencing staggering growth with over 1 million subscribers, which accounts for 3 to 5 percent of all U.S. home video rentals.

Typically, traditional video rental stores focus on major films and ignore older movies and small titles with niche audiences. Netflix is turning that idea upside down by offering a serious market for every movie, not just blockbusters. How? Netflix attributes its success to its proprietary software, called the Netflix Recommendation System, which constantly suggest movies you might like, based on how you rate any of the 15,000 titles in the company's catalog. Beyond recommendations, Netflix has figured out how to get DVDs from one subscriber to the next with unbelievable efficiency with its corporate application infrastructure.

Netflix operates by allowing its subscribers to rent unlimited videos for \$20 a month, as long as they have no more than three DVDs rented at a time. Currently there are more than 3 million discs in the hands of its customers at any given time, with the average of 300,000 DVDs shipped out of the company's 20 leased distribution centers daily. Netflix's unique application infrastructure allows it to track, monitor, and maintain detailed information on each of its disc, customer, and shippers. At any point in time the company can tell you the exact location of each of its disc, a critical components for Netflix's business model.

To handle the rental logistics for its 5.5 million DVD library the company created several proprietary applications. One of its most successful systems is its Web-based supply chain management system. The system works by having operators scan a bar code on each label for every single disc that arrives in its warehouses. The software then retrieves the name and address of the next person on the wait list for that DVD, prints out a label, and the disc is dropped back into the mail. The custom-built systems have allowed Netflix to slow hiring and reduce labor cost by 15 percent, and the vast majority of its DVDs never touch a warehouse shelf. On any given day, 98 percent of the 15,000 titles in Netflix's inventory are in circulation with its customers.

Questions:

1. There are two types of Enterprise information portal (EIP): collaborative processing and decision processing. Explain the main difference between the two types. Which type of EIP would you recommend Netflix implement? Why? (15%)

2. Netflix requires several different departments to make its business work. What types of systems do you think Netflix maintains in its different departments? Can you explain why Netflix would want to integrate the system information among its different departments? (15%)

二 · Vehicular Mobile Commerce

In recent years, growing interest in mobile commerce among users, service providers, content developers, businesses, and researchers has spawned many new applications. Most of these applications are designed to be accessible via personal digital assistants or cell phones, but handhelds have limited capabilities and are impractical or dangerous to use while driving.

Increased computing and communications power, coupled with advances in wireless networking technology and the explosive growth in wireless local area network (WLAN) deployments, have the potential to enable new m-commerce applications for drivers or passengers in motor vehicles. These applications range from entertainment and business services to diagnostic and safety tools. However, for vehicular m-commerce to become a reality, researchers must address a number of technical challenges.

Many vehicles today already offer wireless communication systems that can facilitate vehicular m-commerce. For example, Bluetooth short-range connectivity is currently available in more than 30 car models in North America, and by 2008 will be fitted in more than 20 million vehicles worldwide. With these systems, drivers can use Bluetooth-enabled cell phones—which can remain conveniently stored away in a briefcase or purse—while keeping their eyes on the road and their hands on the wheel.

Once a luxury item, satellite navigation systems are now available at more modest prices. These systems—which can be installed or ported from one vehicle to another—use Global Positioning System (GPS) signals to help drivers get where they want to go, displaying up-to-date maps and route information on an LCD screen. Newer systems give drivers turn-by-turn verbal guidance over the vehicle's radio speakers. Two satellite radio systems, Sirius Satellite Radio and XM Satellite Radio, currently provide US subscribers with more than 120 channels of commercial-free, digital-quality music, news, sports, traffic and weather information, and entertainment.

Telematics systems combine communications and information technologies. For example, General Motors' GPS-based OnStar system connects subscribers with a call center advisor who can remotely give map directions, diagnose mechanical problems on the road, unlock a door if the keys are locked inside, track a stolen vehicle, direct

emergency support to the driver's location, and provide other useful services. The system also offers hands-free calling and access to e-mail, stock quotes, sports news, and other data on the Internet.

The following shows some emerging vehicular m-commerce applications that would serve consumer, business, and government needs.

Wi-Fi hot spots. Automakers are exploring ways to cost-effectively turn vehicles into wireless hot spots capable of providing occupants, and even users outside the vehicle while it is stationary, with Internet access. The problem is the lack of a backhaul connection: An in-car base station or WLAN—soon to appear in select BMW limousines—requires the installation of bulky and expensive hardware.

As one step toward this goal, Ford is prototyping a Lincoln Navigator with a stereo system that contains a Wi-Fi antenna hidden in the dashboard. Users can upload MP3 files to the SUV's entertainment system from a computer within range running on a local wireless network—for example, a home computer system or a laptop in a Wi-Fi-enabled coffee shop.

In-car Wi-Fi connectivity could be used, in conjunction with high-speed WLANs deployed at gas stations, toll booths, fast food restaurants, parking kiosks, and other drive-through locations, to let drivers order and pay for services—in some cases, in advance— from within a vehicle.

Mobile business services. Mobile business services would let drivers download company data, purchase products, participate in mobile auctions, and conduct other transactions, helping to reduce the economic losses and frustration associated with long commutes and roadway congestion.

Location-based services. Using a vehicle's current position, location-based services could provide occupants with customized content upon request, such as up-to-date traffic reports and seating availability at nearby restaurants, or they could proactively push user-sensitive advertisements and other types of information—for example, that a friend connected to the same system is in the area. Each geographical region could have its own database that maintains location information of all fixed entities, and the system could perform location tracking of mobile and portable entities on demand.

Questions:

1. In addition to the example applications mentioned above, give at least one more emerging m-commerce application and explain how it could be implemented? (10%)
2. What kind of obstacles might occur in the popularization of m-commerce? (10%)